

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2003/002302

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 C12N 5/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C12N 5/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean patents and applications for inventions since 1975Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NCBI PubMed database, Delphion Research Intellectual Property Network database "mesenchymal", "growth factor", "confluent",
"neural cell", "replacement"**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6214334 B1 (TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA(US)) 10 April 2001	7-8
A	WO 2002/086108 A1 (LIFECORD INC.) 31 October 2002	1-8
A	WO 1996/15226 A1 (NEUROSFERES HOLDINGS LTD.) 23 May 1996	1-8
A	US 5942225 (CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO; OSIRIS THERAPEUTICS, INC., BALTIMORE, MD.) 24 August 1999	1-8
A	SANCHEZ-RAMOS, J., SONG, S., CARDOZO-PELAEZ, F., HAZZI, C., STEDEFORD, T., WILLING, A., FREEMAN, T. B., SAPORTA, S., JANSSEN, W., PATEL, N., COOPER, D. R., SANBERG, P. R. 'Adult bone marrow stromal cells differentiate into neural cells in vitro' In Exp. Neurol. (August 2000) Vol.164(2):247-256	1-8
A	SCHULDINER, M., YANUKA, O., ITSKOVITZ-ELDOR, J., MELTON, D. A., BENVENISTY, N. 'Effects of eight growth factors on the differentiation of cells derived from human embryonic stem cells' In Proc. Natl. Acad. Sci. U.S.A. (10 October 2000) Vol.97(21):11307-11312	1-8
A	SUGAYA, K. 'Neuroreplacement therapy and stem cell biology under disease conditions' In Cell. Mol. Life Sci. (September 2003) Vol.60(9):1891-1902	1-8

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

09 JULY 2004 (09.07.2004)

Date of mailing of the international search report

12 JULY 2004 (12.07.2004)

Name and mailing address of the ISA/KR

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 8
because they relate to subject matter not required to be searched by this Authority, namely:
Although claim 8 is directed to a method of treatment of the human/animal body, the search has been carried out based on the alleged effects of the neural cells produced by the method of claims 1-6.
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any addition fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2003/002302

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6214334 B1	10.04.2001	US 2001/0052136 A1 WO 1995/12982 A1 WO 1993/08266 A1 EP 0620847 B1	13.12.2001 18.05.1995 29.04.1993 29.04.1998
WO 2002/086108 A1	31.10.2002	KR 2082239 A EP 1379627 A1	31.10.2002 14.01.2004
WO 1996/15226 A1	23.05.1996	US 5750376 JP 10509592 T2 EP 0792350 A1 EP 0783693 B1	12.05.1998 22.09.1998 03.09.1997 07.11.2001
US 5942225	24.08.1999	WO 1996/23059 A US 5736396 EP 0805853 A1	01.08.1996 07.04.1998 12.11.1997